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EXAMINER	
PERVAN, MICHAEL	

ART UNIT	PAPER NUMBER
2629	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/501,367	VOELCKERS, OLIVER	
	Examiner	Art Unit	
	Michael Pervan	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 March 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *7-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *7-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites "advancing the cursor across at least one first character to at least one adjacent, second character, wherein the weighting on the first character defines a distance that the cursor moves when the cursor advances across the first character". However as understood from the specification, it is an indicator that is moving a distance defined by a weighting of the first character while being advanced across the first character. Therefore based on the specification, it is unclear how the weighting on the first character defines a distance that the cursor moves when the cursor advances across the first character.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 7-8 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mason (US 5,841,373) in view of Comerford et al (US 5,963,671).

In regards to claim 7, Mason discloses a method for inputting text using a cursor comprising:

selecting a character from a character set for input as text using at least one of a graphical and audible cursor (Fig. 1 and col. 3, lines 9-23), wherein the selecting includes:

advancing the cursor across at least one first character to at least one adjacent character (Fig. 1 and col. 3, lines 9-23).

Mason does not disclose wherein the character set includes a plurality of characters weighted according to frequency statistics of character sequences and wherein the weighting on the first character defines a distance that the cursor moves when the cursor advances across the first character.

Comerford discloses wherein the character set includes a plurality of characters weighted according to frequency statistics of character sequences (col. 3, lines 22-24).

It would have been obvious at the time of invention to modify Mason with the teachings of Comerford, the size of the letters is changed to emphasize the letters (characters) most likely to be selected, by incorporating the teachings of Comerford into the device of Mason because it allows the user to find the letters (characters) more quickly (col. 3, lines 16-19).

Mason and Comerford when combined disclose wherein the weighting on the first character defines a distance that the cursor moves when the cursor advances across the first character.

In regards to claim 8, Mason does not disclose the method of claim 7, deriving frequencies of the occurrences of all possible character combinations from a representative sample text;

computing, after a first text input and based on a text sequence including the first text input and at least one text input preceding the first text input, probabilities of the respective characters for input as text following the first text input.

Comerford discloses the method of claim 7, deriving frequencies of the occurrences of all possible character combinations from a representative sample text (col. 4, lines 1-12) and computing, after a first text input and based on a text sequence including the first text input and at least one text input preceding the first text input, probabilities of the respective characters for input as text following the first text input (col. 3, lines 50-54).

It would have been obvious at the time of invention to modify Mason with the teachings of Comerford, the size of the letters is changed to emphasize the letters (characters) most likely to be selected, by incorporating the teachings of Comerford into the device of Mason because it allows the user to find the letters (characters) more quickly (col. 3, lines 16-19).

Mason and Comerford disclose sizing a display of the cursor on a character on which the cursor is positioned based on the probability of the character for input as text following the first text input. Since, Mason teaches a cursor (box cursor 30) that surrounds the letter (character) to be selected and Comerford teaches increasing the size of the letters most likely to be selected, when Comerford is incorporated into

Mason, the cursor will change size according the current letter selected, which is determined from the probability of the next most likely letter to be chosen.

In regards to claim 10, Mason and Comerford disclose the method of claim 7 further comprising, sizing displays of the cursor for the respective characters of the character set in accordance with the weighting. Since, Mason teaches a cursor (box cursor 30) that surrounds the letter (character) to be selected and Comerford teaches increasing the size of the letters most likely to be selected, when Comerford is incorporated into Mason, the cursor will change size according the current letter selected, which is determined from the probability of the next most likely letter to be chosen.

Mason and Comerford do not disclose wherein a difference between a largest and smallest size of the display of the cursor is selectable by a user.

It would be obvious to one of ordinary skill in the art to modify Mason and Comerford so that the difference between a largest and smallest size of the display of the cursor is selectable by a user.

In regards to claim 11, Mason and Comerford do not disclose the method of claim 10, wherein the difference is in a range between zero and a predetermined difference.

However, Comerford does disclose a difference of zero (Fig. 3; as can be seen from the drawing the difference between the none emphasized characters is zero) and a predetermined difference (Fig. 3 as can be seen from the drawing the difference between the none emphasized characters is predetermined).

It would be obvious to one of ordinary skill in the art to modify Mason and Comerford to have a difference in a range between zero and a predetermined difference.

In regards to claim 12, Mason discloses the method of claim 7 further comprising:

highlighting a character on which the cursor is positioned (Fig. 2; cursor (cursor box 30) highlights exactly one letter).

Mason does not disclose sizing a display of the cursor on the character on which the cursor is positioned in proportion to a probability of occurrence of the character on which the cursor is positioned, wherein the probability of occurrence of the character on which the cursor is positioned is computed based on a preceding text input sequence and a character sequence frequency table.

Comerford discloses wherein the probability of occurrence of the character on which the cursor is positioned is computed based on a preceding text input sequence and a character sequence frequency table (col. 4, lines 1-12).

It would have been obvious at the time of invention to modify Mason with the teachings of Comerford, the size of the letters is changed to emphasize the letters (characters) most likely to be selected, by incorporating the teachings of Comerford into the device of Mason because it allows the user to find the letters (characters) more quickly (col. 3, lines 16-19).

Mason and Comerford when combined disclose sizing a display of the cursor on the character on which the cursor is positioned in proportion to a probability of occurrence of the character on which the cursor is positioned.

In regards to claim 13, Mason discloses an apparatus for inputting text using a cursor comprising:

a controller including a memory and coupled to a cursor control unit and a display (Fig. 2 and col. 3, lines 43-56);

wherein the display includes a character set including a plurality of characters and a cursor (Fig. 2 and col. 3, lines 51-56), wherein the cursor is at least one of a graphical and audible cursor (Fig. 1 and col. 3, lines 9-23); and

wherein the control unit is operable for controlling advancement of the cursor across at least one first character to at least one adjacent, second character (Fig. 1 and col. 3, lines 9-23).

Mason does not disclose wherein the characters are weighted according to frequency statistics of character sequences and wherein the weighting on the first character defines a distance that the cursor moves when the cursor advances across the first character.

Comerford discloses wherein the characters are weighted according to frequency statistics of character sequences (col. 3, lines 22-24).

It would have been obvious at the time of invention to modify Mason with the teachings of Comerford, the size of the letters is changed to emphasize the letters (characters) most likely to be selected, by incorporating the teachings of Comerford into the device of Mason because it allows the user to find the letters (characters) more quickly (col. 3, lines 16-19).

Mason and Comerford when combined disclose wherein the weighting on the first character defines a distance that the cursor moves when the cursor advances across the first character.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mason in view of Comerford et al in further view of Imaizumi et al (US 6,236,389).

In regards to claim 9, Mason discloses the method according to claim 7, wherein the cursor is rectangularly shaped and moveable at least one of horizontally and vertically across the characters of the character set.

Mason does not disclose wherein the characters vary in size in accordance with the weighting, the method further comprising:

displaying a dot-shaped indicator within the rectangular cursor, wherein the indicator is moveable horizontally and vertically within the cursor; and

moving the indicator within the cursor for advancing the cursor from the at least first character to the at least second character.

Comerford discloses wherein the characters vary in size in accordance with the weighting (col. 3, lines 50-54).

It would have been obvious at the time of invention to modify Mason with the teachings of Comerford, the size of the letters is changed to emphasize the letters (characters) most likely to be selected, by incorporating the teachings of Comerford into the device of Mason because it allows the user to find the letters (characters) more quickly (col. 3, lines 16-19).

Mason and Comerford do not disclose displaying a dot-shaped indicator within the rectangular cursor, wherein the indicator is moveable horizontally and vertically within the cursor and moving the indicator within the cursor for advancing the cursor from the at least first character to the at least second character.

Imaizumi discloses displaying a dot-shaped indicator within the rectangular cursor, wherein the indicator is moveable horizontally and vertically within the cursor and moving the indicator within the cursor for advancing the cursor from the at least first character to the at least second character (Fig. 6 and col. 7, lines 27-36; as can be seen in the drawing the indicator dot (cursor CU) has up to four arrows around it indicating the direction the rectangular cursor (trimming frame TF) can be moved in).

It would have been be obvious at the time of invention to modify Mason and Comerford with the teachings of Imaizumi, moving a cursor (cursor CU) inside another cursor (trimming frame TF), by incorporating the teachings of Imaizumi into the device of Mason and Comerford because it gives the user more accuracy when moving the cursor.

Response to Arguments

6. Applicant's arguments filed March 22, 2007 have been fully considered but they are not persuasive.

Applicant (on page 8 or argument) argues that Comerford does not cure the deficiencies of Mason. Examiner respectfully disagrees.

Comerford does refer to pointing device being used to move a cursor directly to a character located anywhere on the display. However, Comerford was merely citied for

the teaching of emphasizing characters through variable size based on probabilities. By using this teaching with the teaching of Mason, the cursor of Mason would be moving a distance defined by Comerford's emphasizing of characters through variable size based on probabilities. Therefore, the references still read on the claims and the rejection stands.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art (Hermann US 5,270,689) is deemed relevant since it discusses a cursor highlighting exactly one letter, memory, and emphasis of letters.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art (Niemeier US 5,574,482) is deemed relevant since it discusses emphasis of letters based on probability.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Pervan whose telephone number is (571) 272-0910. The examiner can normally be reached on Monday - Friday between 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MVP
June 8, 2007

AMR A. AWAD
SUPERVISORY PATENT EXAMINER